

THEORETICAL FRAMEWORK OF MANAGERIAL DECISION-MAKING DURING A CRISIS IN A DISCONTINUOUS BUSINESS ENVIRONMENT

Dragan Milosevic, Ivan Dudas, Jovanka Popovic⁵

Abstract: Crisis are integral development components of all organizations which are functioning within a discontinuous environment. That is why management in organizations must become aware of the need for implementing the function of crisis management. Crisis management within organizations can be divided into two separate categories: active and reactive crisis management, depending on the specific crisis development phase. Crisis management existence will simplify the process of managerial decision-making in a crisis. It will also facilitate the prevention and recovery of crises. This paper explains the notion of crisis and its development phases, and indicates the need for crisis management within contemporary organizations. It analyses the problems of managerial decision-making during crisis periods from a certain point of view and it emphasises one approach to managerial decision-making.

Keywords: Crisis, crisis management, decision-making, organization, discontinuous environment.

Introduction

Modern organizations operate in conditions that are becoming more and more variable every day. Changes in the environment become frequent, with a further tendency to increase this frequency, with their intensity gradually increasing. The main consequence of this situation is a steady increase in the instability of the entire environment, and therefore an increase in its unpredictability, which, in addition to numerous other factors that have drastically changed the way modern organizations function, further complicates and complicates the overall situation for most organizations.

The inability to realize adequate predictions based on which long-term plans can be made, as well as a lack of understanding of the complexity of the environment, often contribute to creating a situation in which organizations are very often exposed to different forms of crises. Due to the frequent occurrence of crises, there is a need for organizations to accept the crisis as an inseparable part of the process of their development, i.e. to learn how to develop in crises. This means that how organizations will face crises in the future will be one of their basic and at the same time necessary competencies.

The crisis and overcoming it are topics that are extremely important for all people involved in management, whether it is theory or practice. The fact is that crises should no longer be seen as sporadic or isolated events. Nowadays, they have to be given much more importance. Dealing with the crisis is already becoming an activity that will have to be practised by all managers in the organization, regardless of their position in the organizational order and the degree of authority. The key to modern leadership, as well as managing an organization, is precisely in understanding the changes in the environment, and therefore in understanding the inevitability of crises.

⁵ **Dragan Milosevic**, Faculty of management, full professor, **Ivan Dudas**, Faculty of management, PhD student. **Jovanka Popovic**, Faculty of management, associate professor.

✉ corresponding author dragan.milosevic@famns.edu.rs

The modern management team must be aware of this, but also ready to respond to unforeseen situations with concrete and adequate measures (Braverman, 2001).

This paper aims to review and analyze the literature on managerial decision-making during crisis resolution in organizations operating in a modern discontinuous environment.

Research Methodology

The paper applies the method of analysis of the content of literature related to the aim of this paper.

Research results

The concept of crisis and stages of crisis development

The functioning of organizations in modern conditions is exposed to constant pressures for adaptation, which come from the environment, but also the interior of the organization. These pressures are the result of a high level of dynamics of change, which is one of the basic characteristics of the times in which we live. Given this fact, it is clear that nowadays the activities of a large number of organizations are much more often exposed to various forms of crises (Stefanović, 2007).

The term “crisis” is defined in the literature in different ways, depending on the topic being addressed and the disciplinary determination of a specific scientific field. However, diverse interpretations of this term can be somewhat generalized, so it can be said that the term “crisis” refers to any interruption of continuous development. The crisis should be understood as a time-limited process with a predominantly dysfunctional effect on the organization, which can be generated endogenously or exogenously, with at least to a limited extent manageable (Senić, 1996). A crisis is any situation that makes it difficult to achieve organizational goals. It acts destructively on the system as a whole, knocking it out of a state of dynamic equilibrium. In business practice, the crisis is very often manifested by losing market share, reducing profit margins, the emergence of new competitors or substitute products, etc.

Crises in organizations generally develop through four phases, with some of them maximally shortened or even skipped. The following are the following phases (Senić, 1996):

1. a potential crisis,
2. latent crisis,
3. the acute crisis and
4. an insurmountable crisis.

A potential crisis is a situation in which there is no real crisis in the observed organization. This is a situation in which a crisis can potentially develop. A potential crisis is a state in which an organization is in a period when it is not affected by a specific crisis. This thesis suggests that organizations have been in a state of

ambivalence between real and potential crises throughout their lives.

A latent crisis is a period in which symptoms of the development of a crisis can be detected. These symptoms are not visible to all stakeholders, but as a rule only to certain individuals.

It is in the general interest of the organization to detect these symptoms at their early stage of manifestation so that it can respond to them on time, and in an adequate way. Symptoms of the crisis can be detected using early warning systems, which must have a high degree of sensitivity to detect extremely weak signals.

An acute overcoming crisis is a situation in which it is already clear to mostly all stakeholders of the organization, but also the general public that the organization is in trouble. This phase is still characterized by the possibility and economic justification for resolving the crisis.

An acute insurmountable crisis is a state of crisis in which it is no longer possible or expedient to continue the struggle for survival. Here it is usually better to proceed to voluntary and carefully planned liquidation.

The presented classification of stages of crisis development can facilitate management analysis of the crisis. It can help them establish their specific position and, on this basis, determine measures for organizational healing. Knowledge of the concept of crisis development enables modern management to more easily identify crises, and therefore to be adequately prepared for decision-making when managing the resulting crisis.

The necessity of crisis management

Given that today's environment is characterized by a frequent occurrence of crises, it became clear in the 1970s that it was necessary to introduce the practice of crisis management in organizations, where crisis management was then understood as a special form of management of an organization whose actions were threatened. However, today there are statements that due to the discontinuous development of the environment and the market in which numerous organizations operate, management in the future will become crisis management, while managers will become crisis managers. If this happens, crisis management will no longer be understood as special, but as a basic form of management.

In modern conditions, crisis management can still be defined as a special form of management, whose task is to overcome all situations that may endanger or prevent the further survival and development of the organization. Crisis management includes a series of interrelated assessments and examinations of all threats, opportunities, strengths and weaknesses of an organization. In addition, it includes a series of activities to design, redesign and implement key plans, procedures and mechanisms for identifying, preventing and resolving crises. Successful crisis management enables organizations, on the one hand, to partially protect themselves through adequate prevention, and on the other to recover much faster, if the crisis does occur, and to learn much more successfully from their own experience (Senić, 1995).

Many authors around the world believe that crisis management helps organizations

in two ways: through prevention and healing. Therefore, we can say that there are two basic forms, i.e. the role of crisis management (Senić, 1995):

1. Active crisis management involves activities aimed at avoiding a crisis, i.e. preventing a crisis from occurring. Active crisis management has an offensive character. Its task is to prevent only possible or covert (and already emerging crises), through premeditated precautions and activities that are oriented towards the future (in the phase of a potential crisis) or through early warning systems and preventive suppression (in the phase of a latent crisis).
2. Reactive crisis management has a passive, reactive character. It is activated if the previous form of crisis management fails. This type of crisis management is directed against crises in the enterprise that have reached the stages when they are visible to the entire organization (acute crisis of the organization). The task of reactive crisis management consists in combating the organization's emerging crises or mitigating their effects (if it is unable to eliminate them).

When implementing crisis management in its activities, the organization has a far better system of anticipation and protection against possible crises (such situations in market economies are practically every day, and are caused by frequent occurrences of discontinuities in the environment).

Active crisis management

Active crisis management is a model of managing organizational systems in crises, which has an offensive character. It includes methods and techniques that are geared towards the future. They anticipate and prevent potential future crisis hotspots.

Active crisis management can be further broken down into (Senić, 1996):

1. anticipatory crisis management and
2. preventive crisis management.

Anticipatory crisis management is aimed at predicting and analysing future events. This can be realized using various techniques, among which we can mention brainstorming and Delphi. When defining potential future events, the scenario method is resorted to. So-called contingent plans for each potential event are developed, i.e., the way the organization reacts to the anticipated situations is determined. By applying the scenario method, the management of the organization is forced to think about the distant and near future. In addition, the organization becomes ready for different versions of future events, thus avoiding being surprised. In this way, situations in which a crisis occurs at high speed can be avoided very successfully.

Preventive crisis management is aimed at preventing a latent crisis. A latent crisis is characterized by weak, barely noticeable symptoms. In other words, it is a possible initial phase of the crisis, where further development of the situation does not necessarily lead to the development of the crisis. To prevent the occurrence of a possible crisis in time, preventive crisis management is in charge of developing and implementing an early warning system. This system must be able to detect extremely

weak signals that warn of the possibility of the later development of a crisis. In this field, the application of modern information and communication technologies can be of great help.

Reactive crisis management

Reactive crisis management is a model of managing organizational systems in crises, which has a defensive character. It is applied in situations where the previous form of crisis management fails. Reactive crisis management is triggered in situations when it is already clear that the organization has fallen into a crisis.

Reactive crisis management can be divided into (Senić, 1996):

1. repulsive crisis management and
2. liquidation crisis management.

Repulsive crisis management is the first phase of defensive or reactive crisis management. At this stage, the organization is in an advanced symptomatic stage or, more often, in the phase of an acute crisis. The role of repulsive crisis management is to try to apply all possible legitimate measures to achieve organizational healing. This includes, in particular, measures of an economic nature related to the reduction of stocks, improvement of collection from clients, deferral of payments to creditors through negotiations, write-off and sale of part of assets, etc., through measures relating to all processes in the organization to improve effectiveness, efficiency, and therefore competitiveness, up to measures related to mission audit, objectives and organizational forms. One of the measures used as a final solution is the reduction of the number of employees, restructuring, or more broadly, the organization's entry into the process of organizational transformation.

Liquidation crisis management is the final stage of crisis management, which is resorted to only if all the above measures have not yielded positive results. This type of management is oriented towards the planned liquidation, i.e., the planned termination of the work of the organization. At this stage, it is extremely important to adequately protect all stakeholders of the organization. These include owners, all employees, customers, creditors and suppliers, but also the wider environment in which the organization performs its activities. It is necessary to comply with all legal regulations and at the same time try to avoid panic and disorganization in the system that usually arises at these moments.

Management's decision-making during a crisis

A large number of organizations in our country, but also the world, are not adequately prepared to cope with crises. There are two main reasons for this.

The first reason relates to the lack of systematic thinking (Senge, (1990) and the lack of collective awareness in organizations about the need to institutionalize crisis management into existing management systems. The systematic (and situational) approach to organizational management has not yet taken hold in practice in our country. Of course, the lack of understanding of the systemic approach leads to non-systemic thinking, which is why it is not surprising that there is no surprising lack

of awareness of the need for the application of methods, techniques and instruments of crisis management, although it is known that organizational environments are increasingly changing and that this trend will continue in the foreseeable future, which will result in frequent emergence of crises for a large number of organizations. Another reason for the inadequate preparedness of organizations for crises can be found in the limited rationality of managers (Robbins, Coulter, 2005) when making decisions (both in normal and crises). Decision-making is defined as the rational choice of an alternative from a set of available shares (Čupić, et al., 2005). However, although managers make decisions rationally, they are, due to the frequent necessity for applying a multi-criteria approach to decision-making, limited by their ability to process information, as well as their knowledge.

Decisions that managers make during crises, in addition to positive ones, can also have negative effects on the resolution of the crisis. Inadequate decisions can cause even greater damage to the organization, and therefore multiply the impact of the crisis. Of course, in organizations, decision errors occur in two basic forms: mistakes that arise as a result of what is done (or decided) and mistakes that arise as a result of what is not done (or decided) (Ackoff, 2006).

In crises, managers most often resort to a strategy of reducing the cost of doing business. Usually, there are costs on the list that, in their opinion, are not necessary. As a rule, there are representation costs and expenses intended for the development of employees. This is a typical mistake that results from a lack of systematic thinking, as well as the limited rationality of managers when making decisions. Representation costs are usually an essential component of promotional activities, so reducing or eliminating them may lead to a decrease in demand for products or services placed on the market by the organization. If this happens, revenues from the realization of products or services on the market will decrease, which will result in an increase in inventories (in the case of products) and a decrease in the volume of production. Further implications relate to the loss of economies of scale, which means that production costs will increase, and with a decrease in sales revenue, the amount of profit will be lower. The consequences of this will manifest through the inability to absorb fixed costs, as well as the inability to refinance one's own business (Stefanović, 2007).

Reducing costs that are intended for employee development in most cases is also a mistake. By abolishing the ability of employees to further learn and to improve, the possibility of individual development within the organization is abolished, and thus the basis of overall organizational development is abolished. An organization that does not learn and is unable to develop quickly becomes inert and incapable of change. As such, she will not be able to cope with the resulting crisis. This is a classic systemic paradox: an organization that reaches a crisis consciously denies itself the only "painless" possibility for resolving the crisis, which is rehabilitation through organizational development. In this way, the organization is put in a situation where it has to resort to radical measures to remedy the crisis, such as reducing the number of employees or restructuring (which, as a rule, includes reducing the number of

employees).

Downsizing is a radical and socially unpopular measure, which is usually necessary for acute crises. This measure is applied to reduce the costs generated by employees (Rabbin, 1999) and increase the efficiency of operations. The first step towards reducing the number of employees is usually reflected in reducing the share of temporary employment compared to full-time employees. This means that fixed-term contracts are not extended. As a second step, a decision is made not to hire additional staff to replace employees who are on sick leave or those who retire (Jaško, 2001). It can be said that these initial steps are correct from the point of view of the system approach. However, a large number of employee reduction programs are implemented non-systemically, which has far-reaching negative consequences for the further survival and development of organizations. As an example, we can cite the method of reducing the number of employees, which is widespread in a large number of organizations in the territory of Serbia, which is reduced to voluntary termination of employment contracts by employees, with obtaining appropriate severance pay. The consequence of such a program is usually reflected in the abandonment of the organization by the fittest and most valuable workers. These people will find a new job more easily than others, and therefore they are more inclined to leave an organization that is in trouble.

On the other hand, when management reduces the number of employees that are not voluntarily, it usually decides to send older staff to early retirement (thereby reducing the development potential within the organization based on the experience of older workers), the abolition of certain functions (which usually destabilizes the entire organization, because the abolition of functions cannot be carried out without a carefully formulated restructuring plan) or line dismissal, which evenly reduces the number of employees throughout the organization (which also reduces development potential, unless this reduction is carried out based on detailed personnel analysis). For the process of reducing the number of employees to be considered justified, it is necessary to meet several conditions (Jaško, 2001):

- not to be carried out linearly throughout the structure;
- not to be implemented without first considering the consequences for the preservation of employees with key competencies;
- decisions on dismissal are made not in general, according to general criteria, but individually;
- that the criteria and the course (depth and dynamics) of redundancies are public before the dismissal begins;
- to take into account the economic feasibility analysis of the layoff price and the redistribution price of operations;
- that there is cooperation between the middle and lower managers during this process and in the period of hiring with a reduced number of employees;
- to cooperate with trade unions or at least exchange information, etc.

Based on this presentation, it is clear that the issue of managerial decision-making in crises is extremely complex. However, it cannot be said that there are generally

right and wrong decisions. Decision-making in crises must be based on systematic thinking and a situational approach, and the concrete decision will stem from the specifics of the situation in which the organization is located.

Approach to managerial decision-making in crises

Part of the problem of coping with a crisis stems from the way organizations register a crisis. Most organizations register the crisis through accounting and financial reporting. However, a crisis is often not detectable solely through a group of financial indicators, which requires organizations to implement a far more complex system of indicators of organizational performance, which will be based on systematic thinking.

This system of measuring the performance of an organization is already widely known in managerial theory and practice as a balanced scorecard – BSC. It is based on a balanced system of indicators of results and factors that influence results. In other words, the BSC includes score indicators and performance generator (result) indicators. Performance generators are factors that influence or crucially determine future results (performance) and must also be measured (Kaplan, Norton, 1996). In this way, we also come up with factors that are critical to the survival and development of the organization (critical success factors). Critical success factors should be a balanced mix of lagging and performance generator indicators (leading, early indicators) (Pešalj, 2006).

However, identifying crisis hotspots in an organization is only the first step that management must take for the organization it heads to face the crisis. The entire crisis management process can be presented through a concrete methodology that will contain all the necessary steps that managers need to take, to deal with the crisis effectively and efficiently. The methodology of crisis management could be described as follows:

1. identification of the crisis event (situation);
2. analysis of the crisis event (determining the level of significance of the crisis, estimating the duration of the crisis without remediation measures and assessing the current damage, as well as the overall damage without actively dealing with the crisis);
3. planning a response to a crisis event and
4. implementation of measures to remedy the crisis and determine the effects of remediation.

Crises require a different approach to management compared to management in regular conditions (Varma, 2019). During crises, it is necessary to make decisions quickly, to prevent the escalation of the crisis and start resolving the crisis. The idea is to get the organizational system out of the crisis as quickly as possible so that it can continue to develop. This means that crisis management resorts to searching for satisfactory solutions, rather than optimal ones (Laskovaya, et al., 2019).

Because of the need to increase the speed of decision-making, management usually withdraws part of the decision-making authority from its subordinates, thereby

increasing the degree of centralization of management. Management, and above all strategic management, sees the organization as a whole, which is why it is most responsible to make quick and satisfactory decisions that will allow the organization to regain control over its functioning and order. At the end of the crisis, managers return certain decision-making powers to their subordinates, whereby there is an increase in the decentralization of decision-making and management, and the system returns to a normal state of functioning, only at a higher level of complexity, which is the result of the development of the organization during the crisis.

When resolving crises, the question is always whether attention should be paid primarily to short-term or long-term measures. The answer to this question is that short-term problem-solving does not guarantee long-term survival while dealing with long-term rehabilitation is not worth it if the system fails to sustain itself in a shorter period. In other words, short-term and long-term measures need to be implemented simultaneously. Short-term measures are aimed at resolving crisis hotspots that threaten to jeopardize the current liquidity or even solvency of the organization (liquidity crisis), while medium and long-term measures are aimed at the overall consolidation of the system (success crisis and strategic crisis). Short-term measures must be implemented in a manner consistent with the overall crisis resolution strategy (Senić, 1996).

Conclusion

Modern managers must be aware of the necessity of establishing and developing an organizational system in which the role of crisis management will be institutionalized. They must be trained to apply methods, techniques and tools in their daily work that will help them anticipate potential crisis hotspots, evaluate alternative responses to them and decide to choose the optimal one in a given situation, given time and at given limitations. In the event of an escalation of a crisis, managers must be able to effectively cope with the same through the application of a set of adequate measures, which can range from radical to those incremental nature.

By acting in this way, management thoroughly prepares the organization it heads for functioning in the global market, whose sophistication demand is increasing every day, and where the supply, i.e. the level of competition, is gaining additional strength every day.

By implementing crisis management in all managerial processes, over time, organizational systems will be established that will not respond to the crisis measures that have a short-term perspective, and in the long term distract the organization from its strategic intentions. These systems will not see the crisis as an exception but as an inseparable part of the everyday life of their functioning. In other words, organizational action in the future will be able to be seen as the functioning of organizational systems in conditions of permanent crisis. It is up to the management of these organizations to acquire knowledge and skills that will help them build organizations that will be able to successfully respond at any time to all the challenges that the environment of the future will pose.

Acknowledgement

Funding for this work was done by the authors themselves.

Literature

- Ackoff, R., (2006). A Major Mistake That Managers Make, *Handbook of Business Strategy*, Vol. 7, Issue 1, 225-227.
- Braverman, M., (2001). *Are You Crisis Prepared?* <http://www.cmgassociates.com>
- Čupić, M., Tummala, V.M.R., Suknović, M., (2005). *Odlučivanje: formalni pristup*, Fakultet organizacionih nauka, Beograd,.
- Jaško, O., (2001). Downsizing i promene u organizacionoj strukturi, *Strategijski menadžment*, vol. 5, br. 3, 29-34.
- Kaplan, R.S., Norton, D.P., (1996). *The Balanced Scorecard: Translating Strategy into Action*, Harvard Business School Press, Massachusetts.
- Laskovaia, A., Marino, L., Shirokova, G., Wales, W., (2019). Expect the unexpected: examining the shaping role of entrepreneurial orientation on causal and effectual decision-making logic during an economic crisis, *Entrepreneurship & regional development*, VOL. 31, NOS. 5–6, 456–475.
- Pešalj, B., (2006). *Merenje performansi preduzeća: tradicionalni i savremeni koncepti*, Centar za izdavačku delatnost Ekonomskog fakulteta u Beogradu, Beograd.
- Rabbin, J., (1999). Organizational Downsizing: An Introduction, *M@n@gement*, Vol. 2, No. 3, 39-43.
- Robbins, S.P., Coulter, M., (2005). *Management*, Prentice-Hall, New Jersey.
- Senge, P.M., (1990). *The Fifth Discipline: The Art and Practice of the Learning Organization*, Doubleday, New York.
- Senić, R., (1995). *Krizni menadžment – nova ključna funkcija preduzeća*, poglavlje u monografiji: Menadžment i transformacija preduzeća, Ekonomski fakultet – Institut za ekonomska istraživanja, Kragujevac.
- Senić, R., (1996). *Krizni menadžment*, BMG, Beograd.
- Stefanović, I., (2007). Prilog strategijskom poslovnom planiranju sa aspekta teorije haosa, *Nauka i biznis*, br. 2, januar-mart, 198-202.
- Stefanović, I., (2007). Restrukturiranje kao metod sanacije akutne organizacione krize, *Nauka i biznis*, br. 3-4, 197-204.
- Varma, T., (2019). Understanding Decision Making During a Crisis: An Axiomatic Model of Cognitive Decision Choices *International Journal of Business Communication*, Vol. 56(2) 233–248.

Received:15-11-2022

Accepted:05-12-2022